

AMENDMENT TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A communication control apparatus including a memory, the apparatus comprising:

a detection section that detects at least one of a radio environment, comprising a radio communication field intensity and a modulation scheme for radio communication or a network environment in a layer below ~~the~~ a transport layer, comprising identification information of a network with which the communication control apparatus is associated and a communication condition of the network,

a lower layer management section that stores information of the detected radio environment or network environment in the memory of the apparatus, monitors whether or not a change has occurred in the radio environment or in the network environment and provides a monitoring result to an application layer, without the result being conveyed through the transport layer; and

a control section that performs communication service control in the application layer, based upon the monitoring result received from the lower layer management section without the result being conveyed through the transport layer.

2. (Previously Presented) The communication control apparatus according to claim 1, wherein:

the lower layer management section monitors a change in the radio environment or in the network environment in the lower layer below the transport layer in an OSI (Open System Interconnection) hierarchical model; and

the control section performs communication service control by means of the application layer, in accordance with the change in the environment in the lower layer below the transport layer.

3. (Previously Presented) The communication control apparatus according to claim 2, wherein the control section comprises a decision section that, when the change in the radio environment or in the network environment satisfies a predetermined condition, decides on a control operation for changing the communication service in accordance with the change in the radio environment or in the network environment .

4. (Canceled)

5. (Previously Presented) The communication control apparatus according to claim 3, wherein the decision section changes operation relating to at least one of service quality in network transmission, signaling information transmission/reception, or transmit data transmission/reception.

6. (Previously Presented) The communication control apparatus according to claim 5, wherein:

the control section further comprises a notification section that, when negotiation with a communicating station is necessary, notifies the communicating station that a call involving the communicating station is to be updated; and

the decision section decides on a control operation after a call has been updated.

7. (Original) A communication terminal apparatus comprising the communication control apparatus according to claim 1.

8. (Original) A server apparatus comprising the communication control apparatus according to claim 1.

9. (Currently Amended) A communication control method of a communication control apparatus, the method comprising:

detecting at least one of a radio environment, comprising a radio communication field intensity and a modulation scheme for radio communication or a network environment, comprising identification of a network with which the communication control apparatus is associated and a communication condition of the network,

storing information of the detected radio environment or network environment, monitoring whether or not a change has occurred in the radio environment or in the network environment and providing a monitoring result to an application layer, without the result being conveyed through the transport layer; and

performing communication service control in the application layer, based on the monitoring result received without the result being conveyed through the transport layer.

10. (New) The communication control apparatus according to claim 1, the radio communication taking place between a transmitter and a receiver, the transmitter transmitting data and the receiver receiving data over the network.